

Title (en)  
DISTANCE MEASUREMENT DEVICE, DISTANCE MEASUREMENT METHOD, AND PROGRAM

Title (de)  
DISTANZMESSVORRICHTUNG, DISTANZMESSVERFAHREN UND PROGRAMM

Title (fr)  
DISPOSITIF DE MESURE DE DISTANCE, PROCÉDÉ DE MESURE DE DISTANCE ET PROGRAMME

Publication  
**EP 3940415 A1 20220119 (EN)**

Application  
**EP 21170888 A 20210428**

Priority  
JP 2020121185 A 20200715

Abstract (en)  
A distance measurement device includes a plurality of laser sensors and a control unit. The plurality of laser sensors configured to project a laser beam and receive reflected light from a measurement target that moves within a measurement region. The control unit configured to drive, based on the measurement region and a provision position of the plurality of laser sensors, each of the laser sensors at a light emission cycle in which a light receiving window that receives reflected light of own light and an interference risk range are included the interference risk range being a range in which an interference is caused by a laser beam from another laser sensor. The control unit controls to laser beam emission timings of the plurality of laser sensors so as to be different from each other.

IPC 8 full level  
**G01S 7/487** (2006.01); **G01S 17/87** (2020.01); **G01S 17/89** (2020.01); **G01S 17/931** (2020.01)

CPC (source: CN EP US)  
**G01S 7/4812** (2013.01 - CN); **G01S 7/484** (2013.01 - US); **G01S 7/487** (2013.01 - EP); **G01S 7/497** (2013.01 - US); **G01S 17/08** (2013.01 - CN);  
**G01S 17/10** (2013.01 - US); **G01S 17/87** (2013.01 - EP); **G01S 17/89** (2013.01 - EP); **G01S 17/894** (2020.01 - CN); **G01S 17/931** (2020.01 - EP)

Citation (applicant)  
• JP 2018063222 A 20180419 - FUJITSU LTD  
• JP 2017125682 A 20170720 - DENSO CORP  
• JP 2013235390 A 20131121 - ATSUMI ELECTRIC

Citation (search report)  
• [X] US 2020200873 A1 20200625 - SCHMIDT BODO [US]  
• [A] US 2017269215 A1 20170921 - HALL DAVID S [US], et al  
• [A] US 2017328993 A1 20171116 - WARKE NIRMAL C [US], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3940415 A1 20220119**; CN 113945939 A 20220118; JP 2022018229 A 20220127; US 2022018937 A1 20220120

DOCDB simple family (application)  
**EP 21170888 A 20210428**; CN 202110527807 A 20210514; JP 2020121185 A 20200715; US 202117307425 A 20210504